

LAND APPLICATION SITE

KYLE A. DUFFER

DWKAD 1 - 2

DINWIDDIE COUNTY

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 3-15-19 between Kyle Duffer referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Dinwiddie Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) with county documentation identifying owners, attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>52-5C</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☒ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

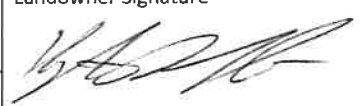
In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Printed name <u>Kyle A. Duffer</u>	Mailing Address <u>15002 Melhissicks Rd</u> <u>Melhamcs VA 23872</u>	Landowner Signature 
By:	Phone No. <u>434-579-2490</u>	
Title*		
* <input type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc.		
* <input type="checkbox"/> I certify that I am a responsible official [or officer] authorized to act on behalf of the following corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name Susan Trumbo	Mailing Address PO Box 562, Remington Virginia 22734	Permittee Authorized Representative Signature 
Title Technical Manager	Phone No. 540-547-3300	

Permittee: Recyc Systems, Inc

County or City: Dinwiddie

Landowner: Kyle A. Duffer

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:


1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).


Landowner's Signature

15 MAR 2019
Date


Operator's Signature

4524 White Oak Rd.
Blackstone, VA 23824
804-896-4221
mailing address & phone

3/15/19
Date

Landowner Coordination Form

Permittee: Recyc Systems, Inc.

County or City: Dinwiddie County

Signature not required on this page

[illegible]

FARM DATA SHEET

SITE NAME:	Kyle A. Duffer	COUNTY:	Dinwiddie
OWNER:	Kyle A. Duffer	OPERATOR:	Nick Moody Southside Ag Enterprises
OWNER'S ADDRESS:	15002 McKissicks Rd. McKenney, VA 23872	OPERATOR'S ADDRESS:	4524 White Oak Rd. Blackstone, VA 23824
OWNER'S TELEPHONE:	434-579-2490	OPERATOR'S TELEPHONE:	804-896-4221
GENERAL FARM TYPE:	Row Crop	CELL PHONE:	804-896-4221
# CATTLE:	None	EMAIL:	Nickm88@vt.edu
LAGOON or SLURRY:	None	LATITUDE:	37.066
TOPO QUAD:	Darvills	LONGITUDE:	-77.837
COMMENTS:	METHOD OF DETERMINATION: Online Maps		
The old Mark E. Winters book is now the new Kyle A. Duffer book.			
BB 97 9-8-2020			

RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood			
DWKAD 1	12.8	-	-	-	-	CU 15	52-5C	T 462 F 1, 2
DWKAD 2	25.3	-	-	-	-	CU 15	52-5C	T 462 F 4, 5, 6
TOTAL ACRES IN SITE	38.1							

9-8-2020

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet
(Fall, 2020-Winter, 2022)
Kyle A. Duffer
Planner: John Doe

Tract: 462

Location: Dinwiddie

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
1, 2/DWKAD 1(N)	13/13	2020 2021	Wheat (grain) *** **	100-60-60 -- --	20/0				80-60-60	N/A			
4, 5, 6/DWKAD 2(N)	25/25	2020 2021	Wheat (grain) *** **	100-60-60 -- --	20/0				80-60-60	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
462	DWKAD 1	13	[No Test]						
462	DWKAD 2	25	[No Test]						

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
462	462/1, 2	DWKAD 1	13	Appling	IVa	II	III	III	
	462/4, 5, 6	DWKAD 2	25	Cecil	IVa	II	III	II	

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan: **New Plan** **Fall, 2020 - Winter, 2022**

Farm Name: **Kyle A. Duffer**

Location: Dinwiddie

Specialist: John Doe

N-based Acres: 38.1

P-based Acres: 0.0

Tract Name: **462**

FSA Number: 462

Location: Dinwiddie

Field Name: **DWKAD 1**

Total Acres: 12.80 Usable Acres: 12.80

FSA Number: 1, 2

Tract: 462

Location: Dinwiddie

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
97	2B	Appling
3	2C	Appling

Field Warnings:

Field Name: DWKAD 2

Total Acres: 25.30 Usable Acres: 25.30

FSA Number: 4, 5, 6

Tract: 462

Location: Dinwiddie

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE PH

P

K

Lab

[NO TEST]

Soils:

PERCENT

56

44

SYMBOL

4B

4C

SOIL SERIES

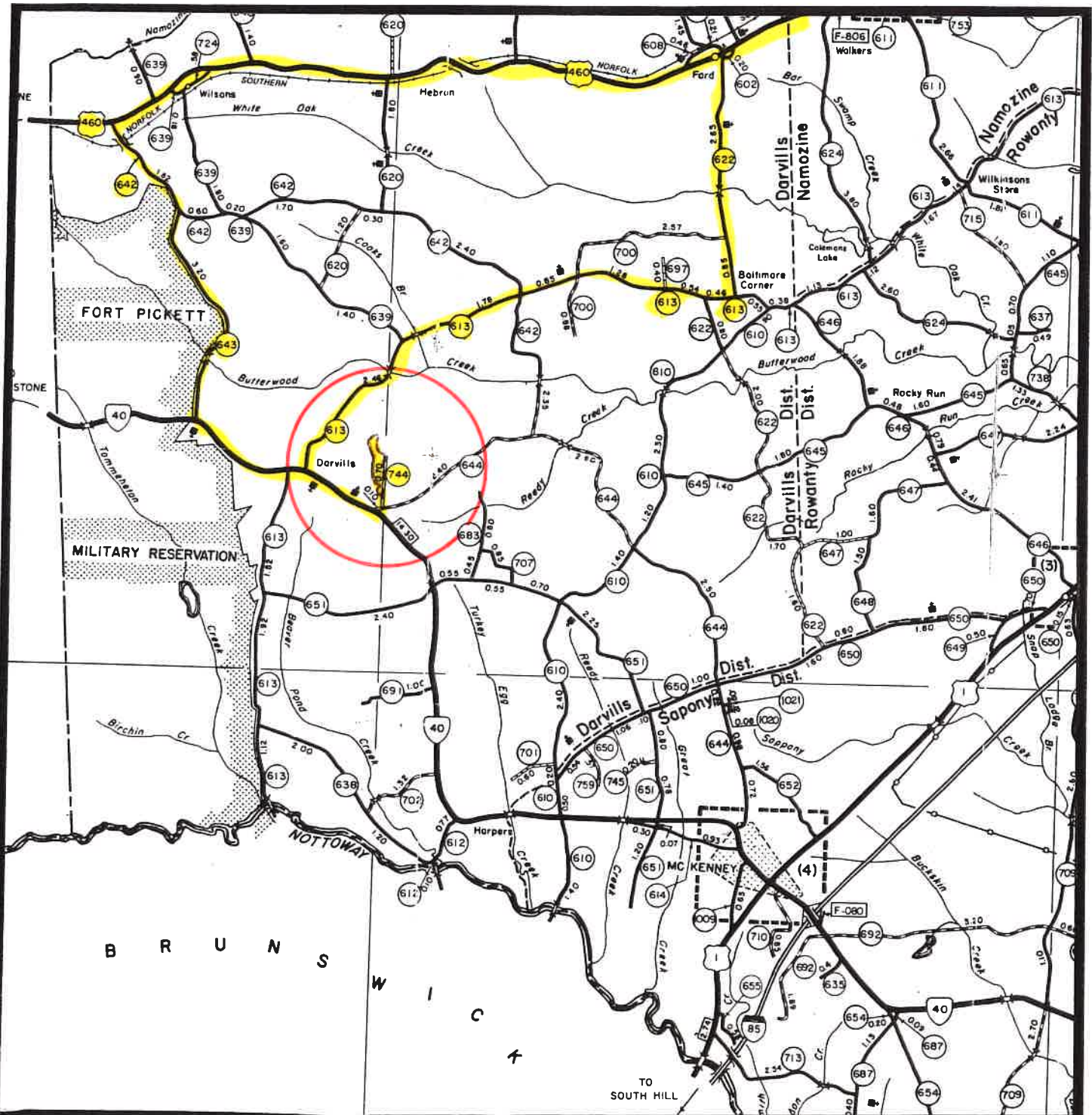
Cecil

Cecil

Field Warnings:

MAPS

(Biosolids Land Application)



DW**KAD** 1-2

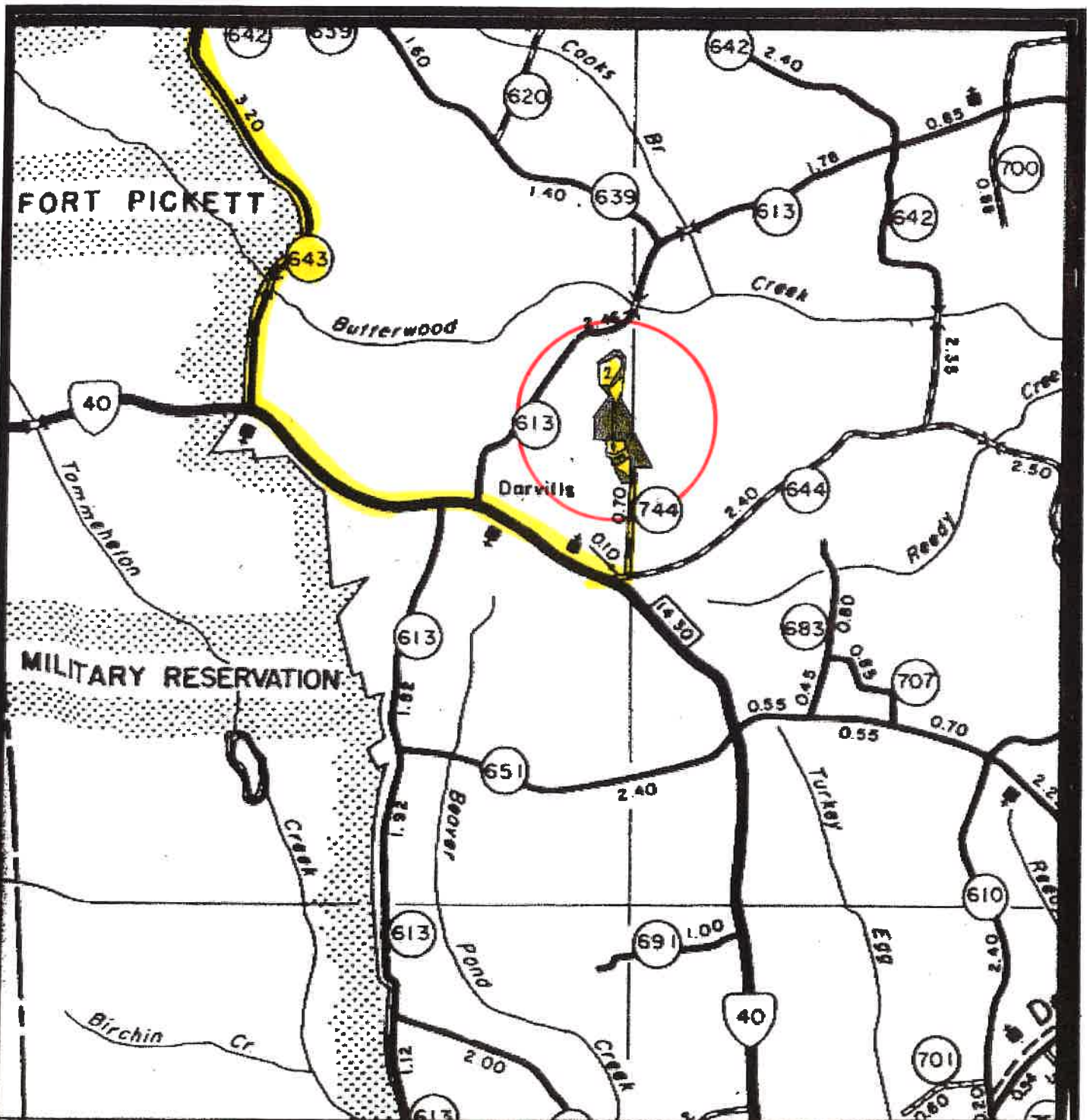
Truck route

VICINITY MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 1 mile

DW.KAD 1-2

9-8-2020

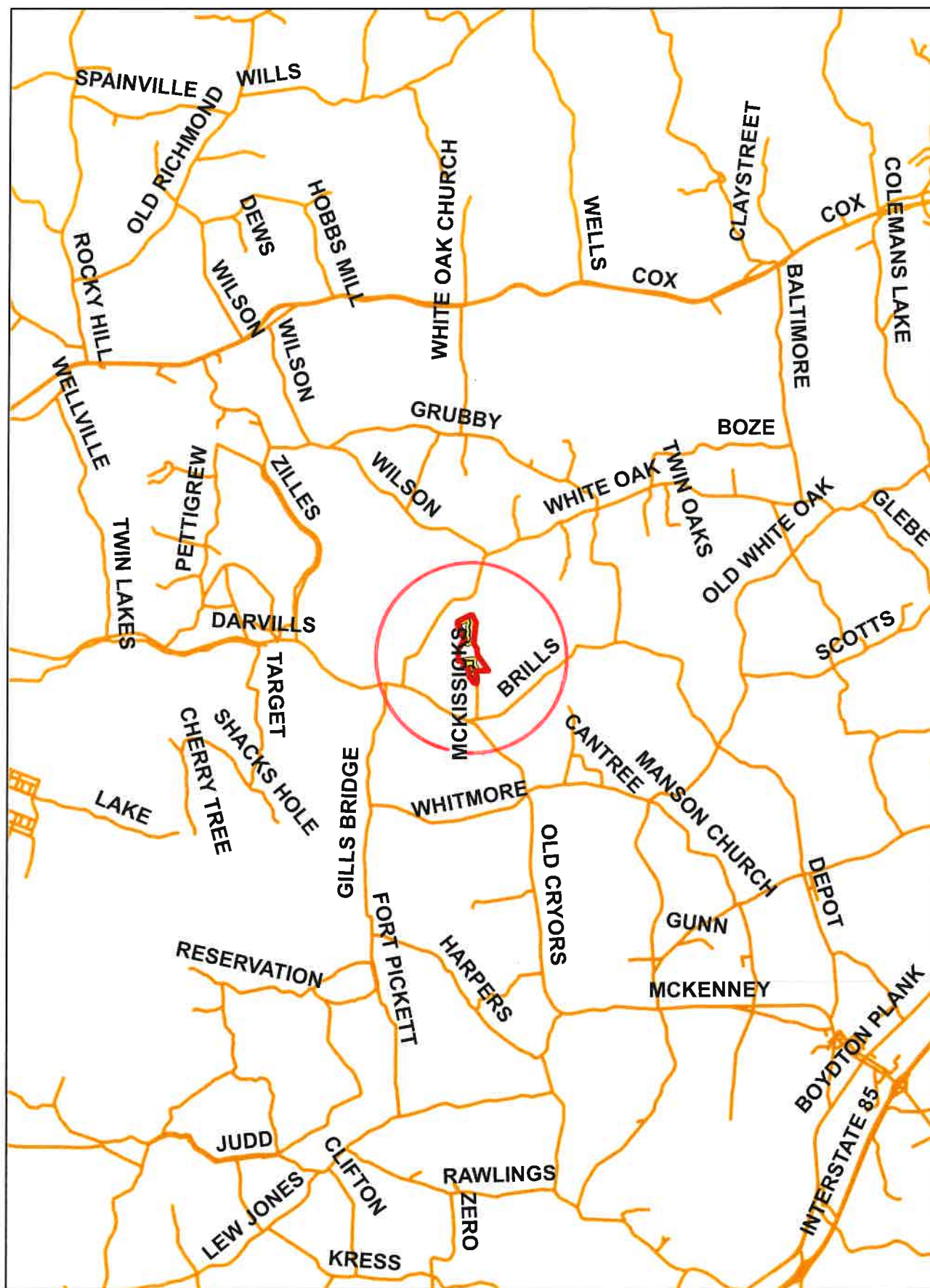
Truck
Route

VICINITY MAP





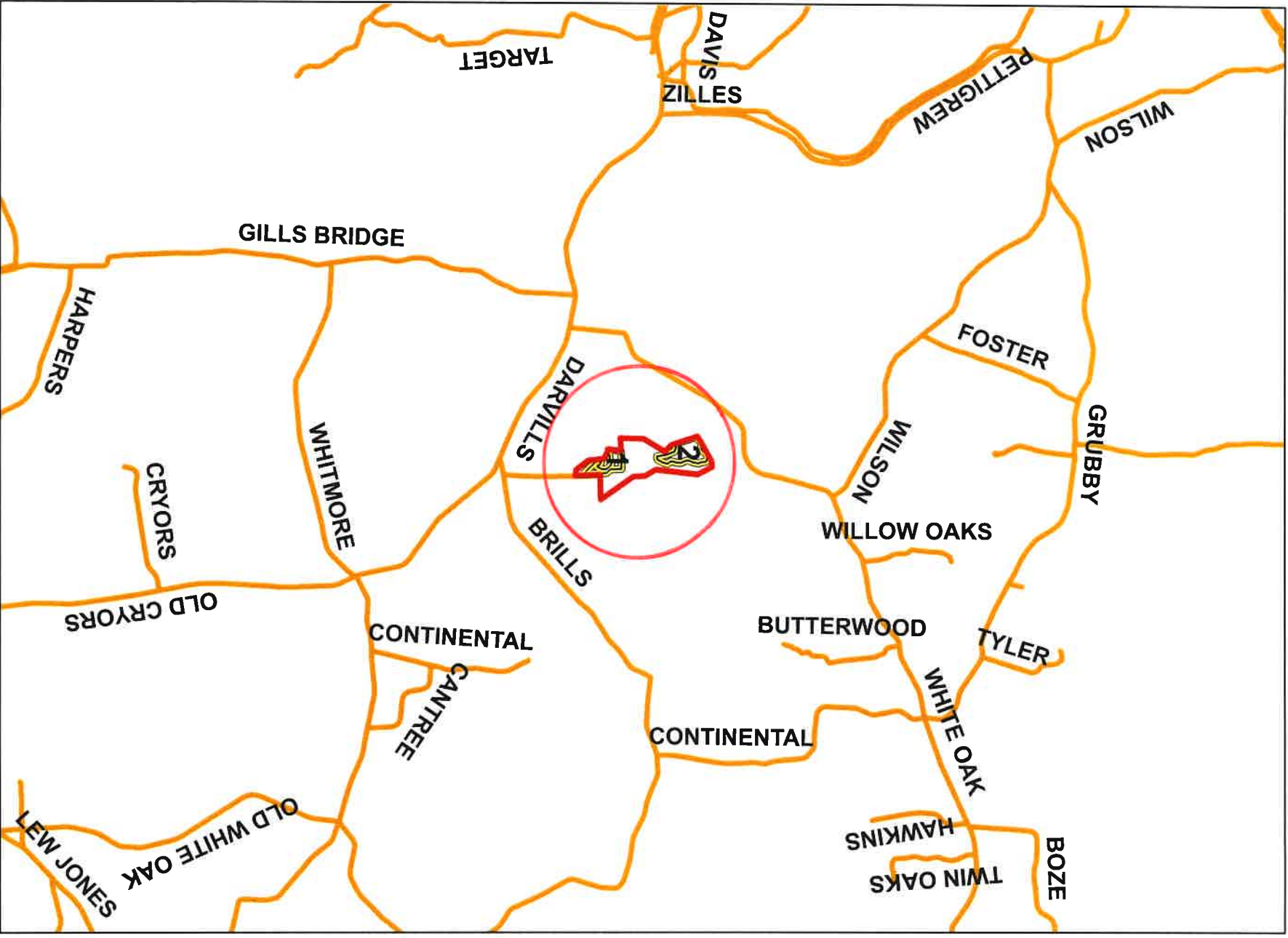
Kyle A. Duffer DWKAD



9-8-2020

Vicinity Map

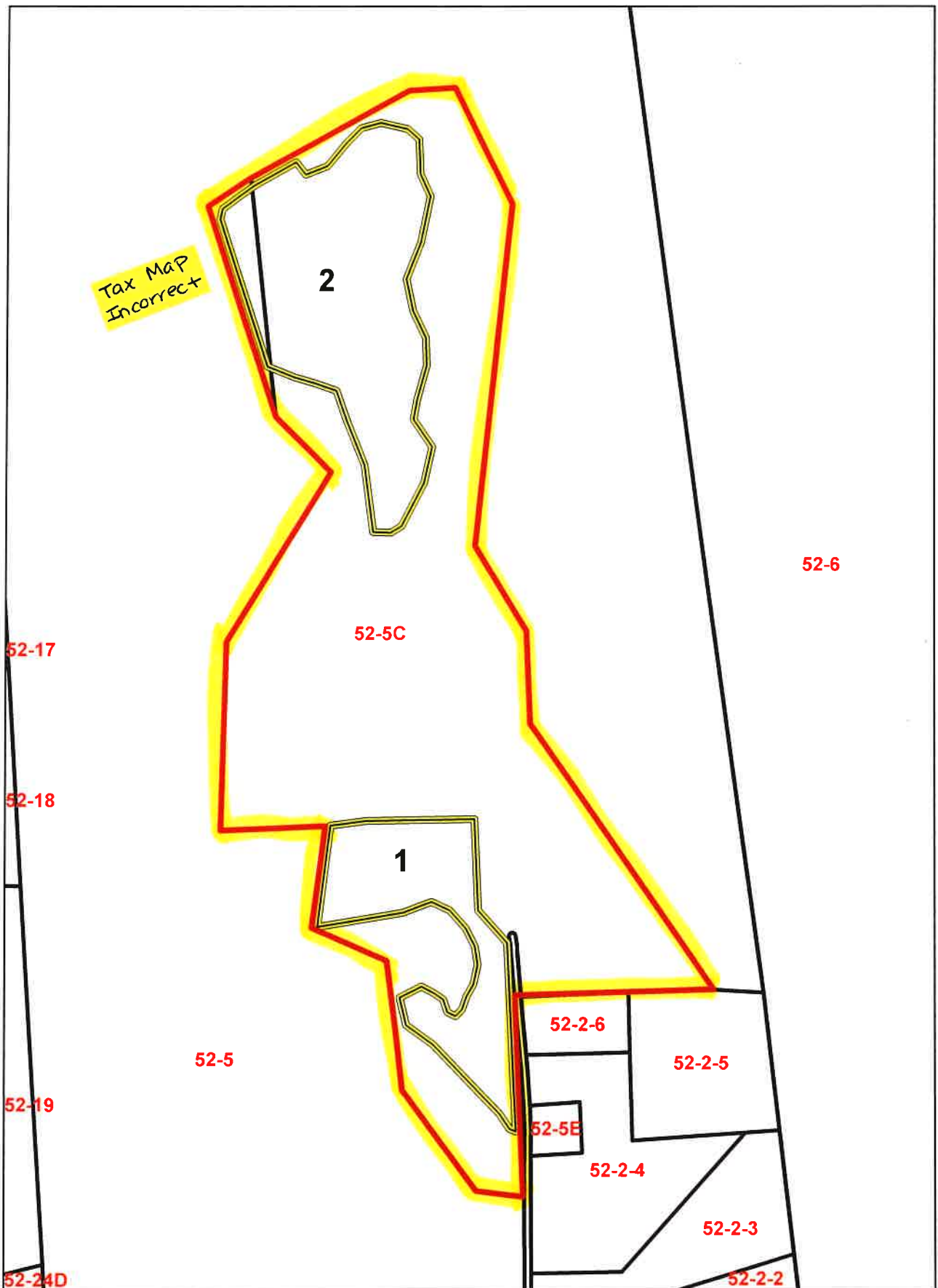
1 in = 2 miles



4-8-2020

Vicinity Map

1 in = 1 miles



9-8-2020

Tax Map

1 in = 660 feet

Property Identification Card**Record Number: 12067****DINWIDDIE COUNTY****Property Information (Map: 52 5C)****Owner:**

DUFFER KYLE A

Legal Description(s):

MCKISSICK LAND RT. 40

Owner Address:

15002 MCKISSICKS RD

CONSERVATION EASEMENT 23.55AC

52-5C

MCKENNEY, VA 23872

Zoned:

A2

Total Land Area:

115.50 Acres

Prior Assessment:

Land Use Value

\$246,900

\$79,471

Magisterial District:

DARVILLS

Property Address:

15002 MCKISSICKS RD

Plat Bk/Pg (Instrument):

MCKENNEY, VA 23872

7 / 46(20 0001708)

Remarks:

COULD NOT ACCESS BACK YARD; DOG.

Assessment Values (Map: 52 5C)**Building 1:**

\$53,100

Land Value:

\$209,600

Other Improvements:

\$3,700

Total Value:

\$266,400

Acreage Description (Map: 52 5C)**Size In Acres:**

1.00

Description:

Homesite

Lump Sum or Per Acre:

Lump Sum

Unit Value:**Adjustment Percentage:**

0.00

Utility Value:

15,000

Acreage Value:

\$15,000

Size In Acres:

24.90

Description:**Lump Sum or Per Acre:**

Per Acre

Unit Value:**Adjustment Percentage:**

0.00

Utility Value:

3,000

Acreage Value:

\$74,700

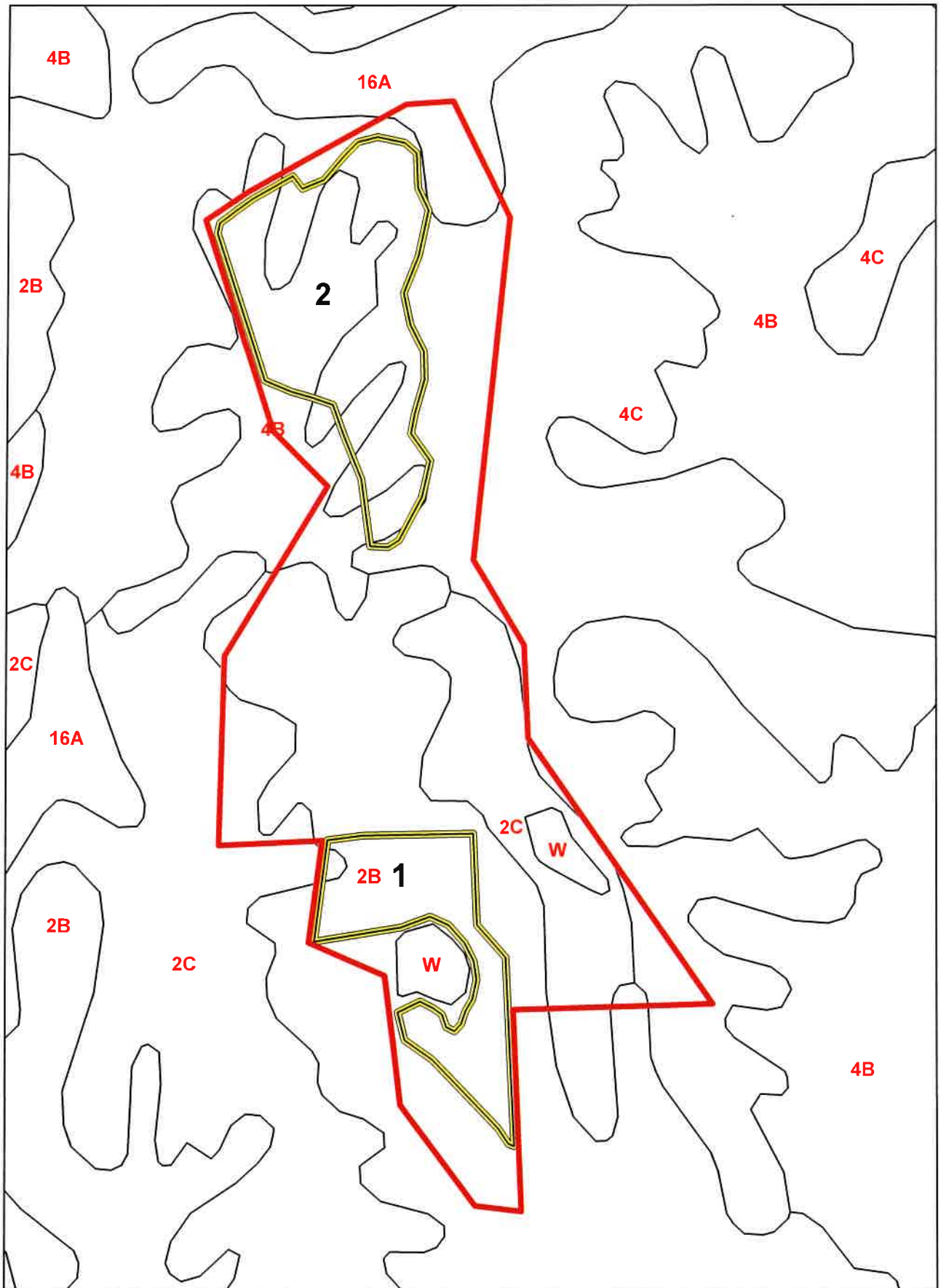
Size In Acres:

ADJOINING LANDOWNERS

KYLE A. DUFFER

DINWIDDIE COUNTY

Tax Map	Parcel #	Owner Name(s)
52	5 5E	Scott Timberland Co LP Jackie R. Hawkes
52-2	4 5 6	Jackie R. Hawkes Barbara Annette Hawkes Cone Estate c/o Aubert Cone Jackie R. Hawkes



9-8-2020
Frequently
Flooded

Soil Map

1 in = 660 feet



Field Id	Gross Acres
DWKAD 1	12.8
DWKAD 2	25.3
TOTAL	38.1



9-8-2020

Aerial Map

1 in = 660 feet



United States
Department of
Agriculture

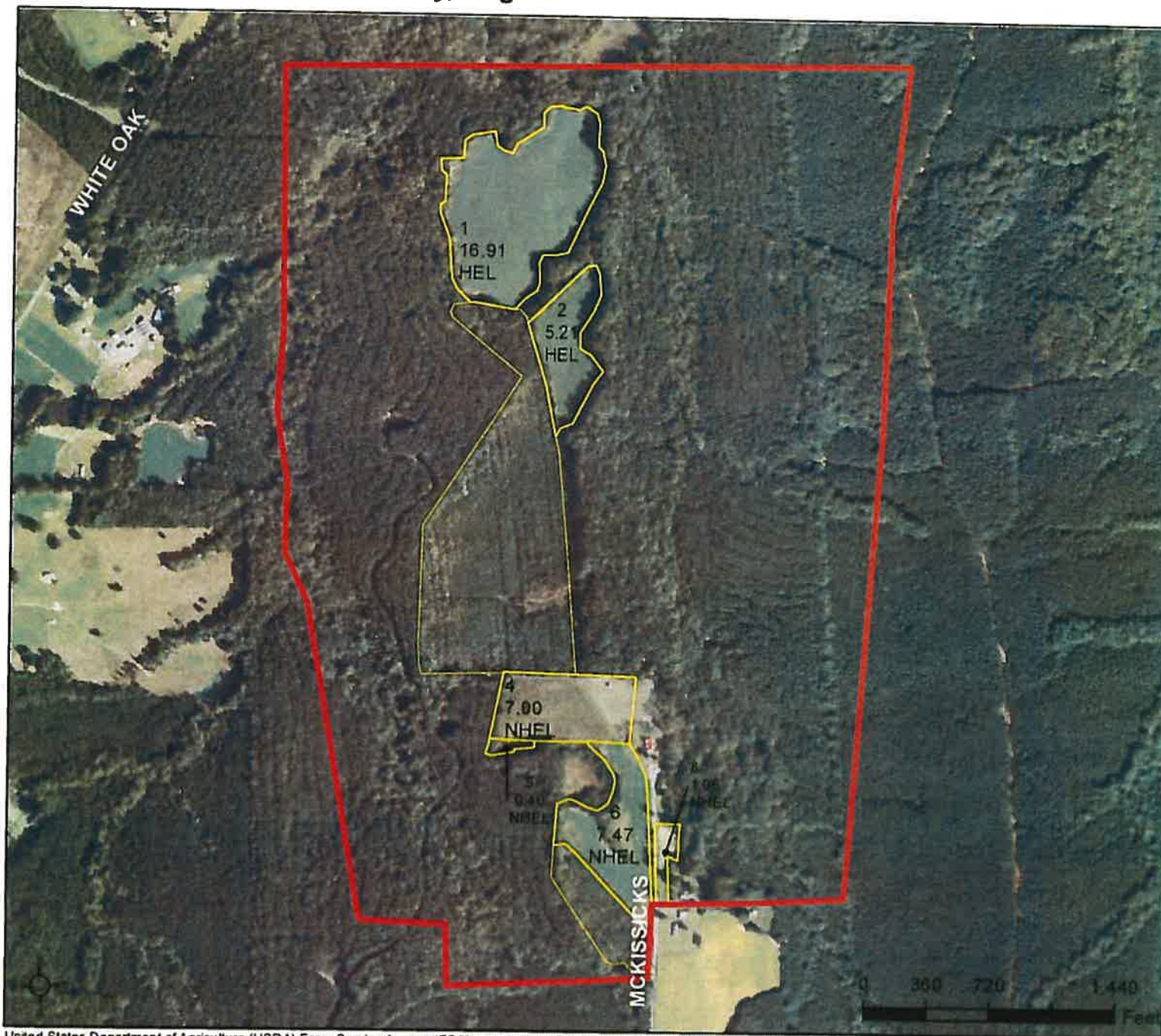
Dinwiddie County, Virginia

Tract 462

Farm 2314

2019 Program Year

Map Created June 20, 2019



Common Land Unit

- Non-Cropland
- Cropland
- rci_l_va053
- Tract Boundary



















Wetland Determination Identifiers

- Restricted Use
- Limited
- Exempt from Conservation Compliance Provisions

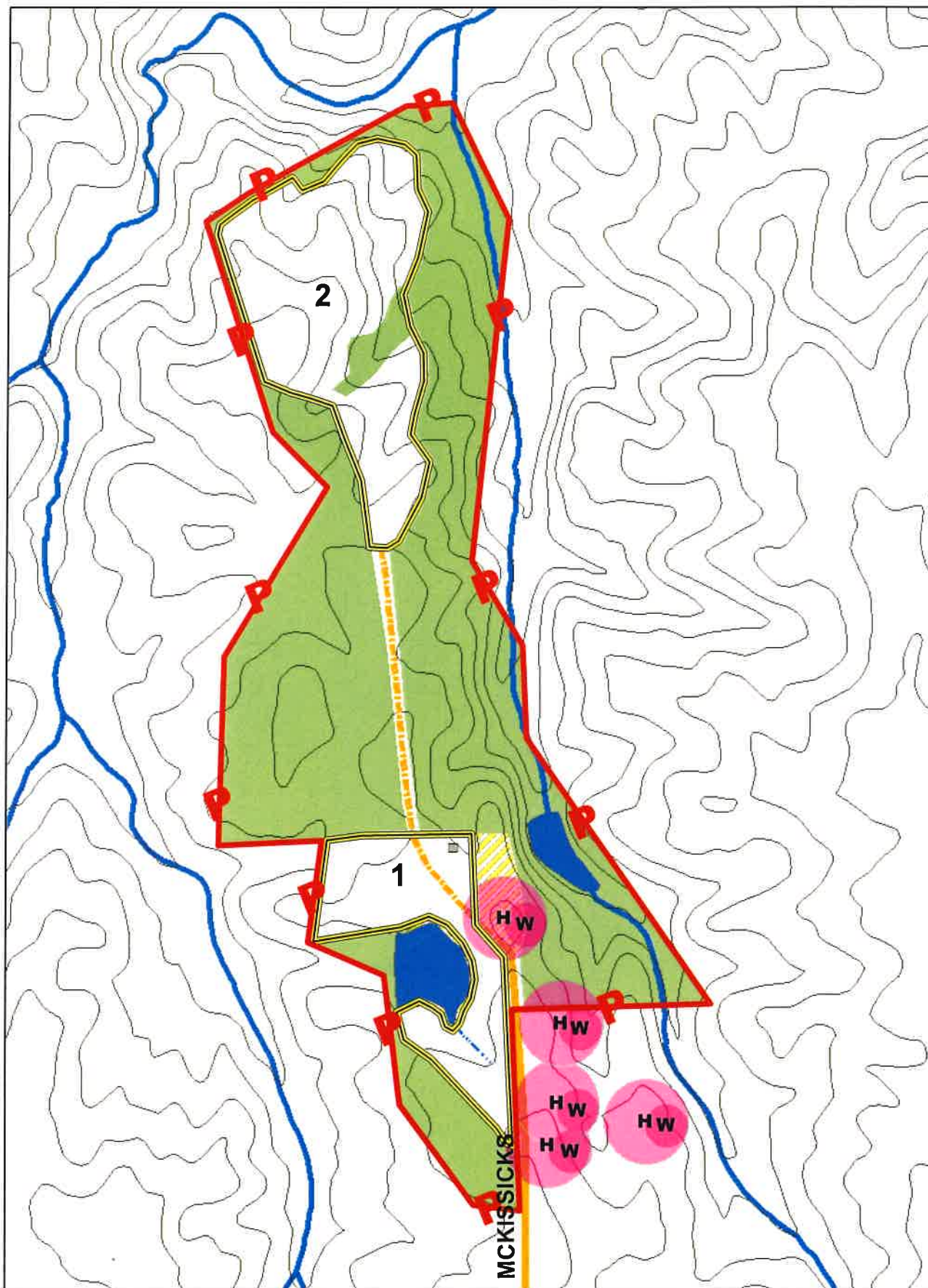
Tract Cropland Total: 38.05 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

Legend For Site Plan

Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
 	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
  	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
 	Slope	15% maximum
	Hashed out Area	No application

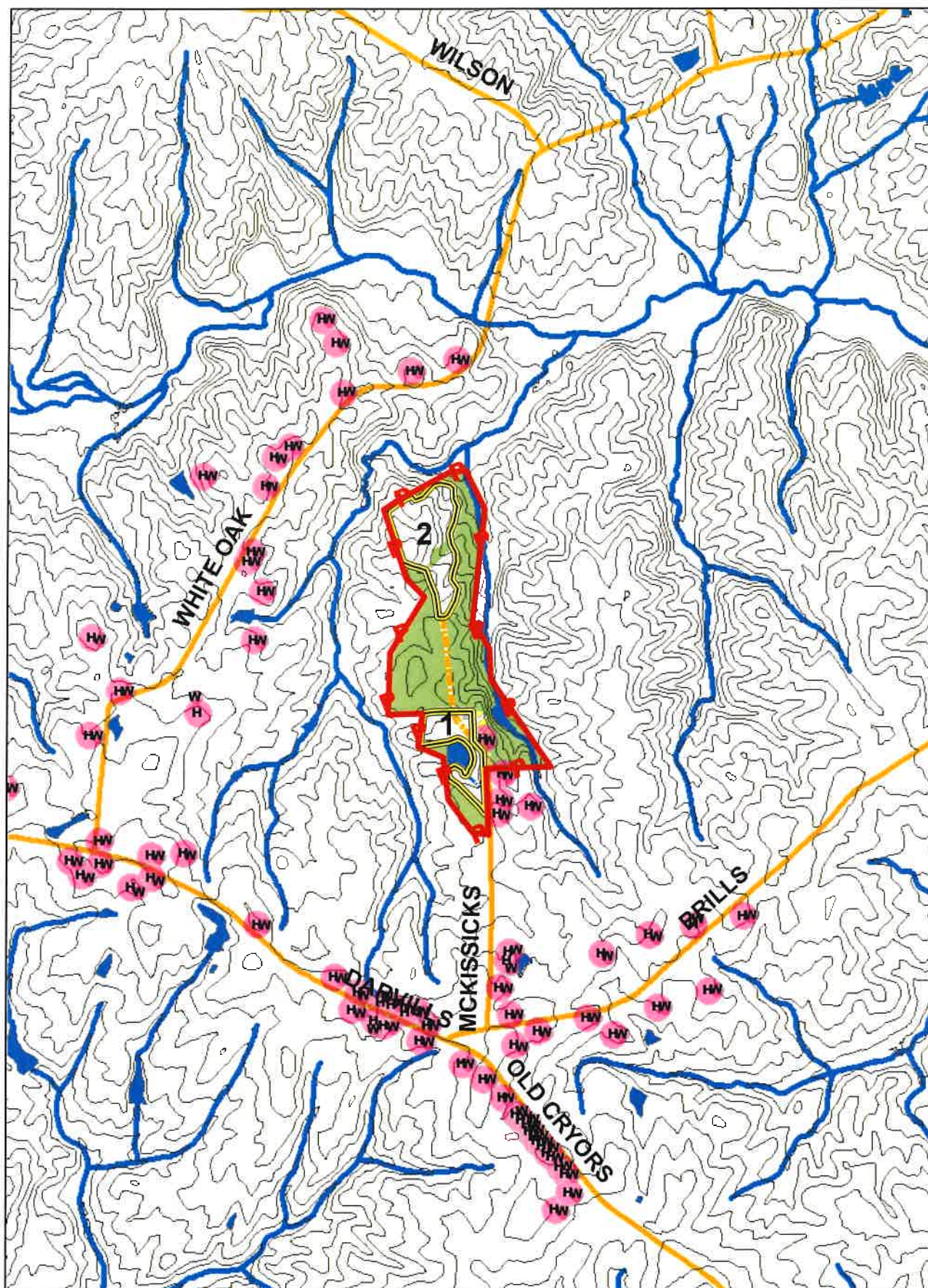
*Buffer can be reduced or waived upon written consent from landowner.



9-8-2020

Site Map

1 in = 660 feet



9-8-2020

Topographic Map

1 in = 2,000 feet